## **CLAIMS**

## What is claimed is:

- 1 1. A method, comprising:
- a) sending ATM source identification and an ATM-TDM correlation tag
- 3 from an ATM source gateway to a telephony signaling control network;
- b) receiving at an ATM destination gateway said ATM source
- 5 identification and said ATM-TDM correlation tag sent from said telephony
- 6 signaling control network; and
- 7 c) sending said ATM-TDM correlation tag from said ATM destination
- 8 gateway to said ATM source gateway to establish a connection between said
- 9 ATM destination gateway and said ATM source gateway.
- 1 2. The method of claim 1 further comprising sending notification of a call
- 2 from said telephony signaling control network to said ATM source gateway
- 3 before said ATM source identification and said ATM-TDM correlation tag are
- 4 sent to said telephony signaling control network.
- 1 3. The method of claim 2 wherein said ATM source gateway generates said
- 2 ATM-TDM correlation tag in response to said notification.
- 1 4. The method of claim 3 wherein said ATM-TDM correlation tag is a
- 2 random number.

- 1 5. The method of claim 2 wherein said notification identifies which trunk
- 2 line said call will be carried over, said trunk line coupling said ATM source
- 3 gateway to a first telephony network.
- 1 6. The method of claim 2 wherein said notification further identifies which
- 2 TDM time slot said call will be carried over, said TDM time slot on an trunk line
- 3 that couples said ATM source gateway to a first telephony network.
- 1 7. The method of claim 6 further comprising, after receiving said ATM-TDM
- 2 correlation tag at said ATM source gateway, reflecting within a mapping table of
- 3 said ATM source gateway that a VPI/VCI address received in a SETUP message
- 4 with said ATM-TDM correlation tag corresponds to said particular TDM time
- 5 slot.
- 1 8. The method of claim 1 wherein said sending said ATM-TDM correlation
- 2 tag further comprises sending a SETUP message within an ATM network in a
- 3 direction from said ATM destination gateway to said ATM source gateway.
- 1 9. The method of claim 8 further comprising sending a CONNECT message
- 2 within said ATM network in a second direction from said ATM source gateway
- 3 to said ATM destination gateway after said SETUP message has been received at
- 4 said ATM source gateway.

- 1 10. The method of claim 1 wherein said sending said ATM-TDM correlation
- 2 tag further comprises sending a ERQ message within an ATM network in a
- 3 direction from said ATM destination gateway to said ATM source gateway.
- 1 11. The method of claim 10 further comprising sending a ECF message within
- 2 said ATM network in a second direction from said ATM source gateway to said
- 3 ATM destination gateway after said ERQ message has been received at said
- 4 ATM source gateway.
- 1 12. The method of claim 1 further comprising sending, from said telephony
- 2 signaling control network to said ATM destination gateway, which TDM time
- 3 slot within a trunk line said call will be carried over, said trunk line coupling said
- 4 ATM destination gateway to a telephony network.
- 1 13. The method of claim 12 further comprising updating a mapping table
- 2 within said ATM destination gateway to reflect that a cell with a particular
- 3 VPI/VCI corresponds to information carried over said TDM time slot.
- 1 14. The method of claim 1 further comprising sending, from said telephony
- 2 signaling control network to said ATM destination gateway, which TDM time
- 3 slot said call will be carried over.
- 1 15. The method of claim 12 further comprising updating a mapping table
- within said ATM destination gateway to reflect that a cell with a

| 3 |     | particular VPI/VCI corresponds to information carried over said TDM   |
|---|-----|---|
| 4 |     | time slot.  |
| 1 | 16. | A method, comprising:   |
| 2 |     | a) sending an ATM-TDM correlation tag from an ATM                     |
| 3 |     | source gateway, through a telephony signaling control                 |
| 4 |     | network to an ATM destination gateway; and                            |
| 5 |     | b) sending said ATM-TDM correlation tag from said ATM                 |
| 6 |     | destination gateway to said ATM source gateway with a                 |
| 7 |     | SETUP message.  |
| 1 | 17. | The method of claim 16 wherein said ATM-TDM correlation tag is        |
| 2 |     | within a Called Party Sub Address Information Element (IE) of said    |
| 3 |     | SETUP message.  |
| 1 | 18. | The method of claim 16 wherein said ATM-TDM correlation tag is        |
| 2 |     | within a Generic Identifier Transport (GIT) IE of said SETUP message. |
| 1 | 19. | The method of claim 16 wherein said ATM-TDM correlation tag is        |
| 2 |     | within a Generic Application Transport (GAT) IE of said SETUP         |
| 3 |     | message.  |
| 4 |     |   |

- The method of claim 16 wherein said ATM-TDM correlation tag is
   within a User to User IE of said SETUP message.
   The method of claim 16 wherein said ATM-TDM correlation tag is
   within a Network Call Correlation Identifier (NCCI) IE of said SETUP
   message.
   The method of claim 16 wherein said ATM-TDM correlation tag is
- 22. The method of claim 16 wherein said ATM-TDM correlation tag is
  within a Calling Party Sub Address IE of said SETUP message.

- 1 23. The method of claim 16 wherein said ATM-TDM correlation tag is
- within a Served User Generated Reference (SUGR) IE of said SETUP
- 3 message.